Modular HPU: high-end hydraulic power units
Standard power unit, easy to individualize

By standardizing the individual elements of a hydraulic power unit as well as the subframes on which the elements are mounted together on modules, significant time and cost reductions can be realized. HPU assemblies with an installed power ranging from 350 to 3000kW can be delivered to the market fast while at the same time meeting the highest quality standard.

Modular configuration of the HPU

In order to reduce production time and improve time to market, modules and supporting frames have been standardized and a variation of options has been pre-defined. This modular approach complies with the latest ISO standards and fits to Industry 4.0 with a complete set of condition monitoring options.

Benefits

- Type Approval by Lloyds Register
- Fast delivery time
- High quality
- Complies to latest ISO standards
- Optimized dimensions and footprint
- Condition monitoring options
- Premium efficiency IE3 motors
- Pre-installed cabling to reduce installation and commissioning time

Key technical data

- Capacity 350 – 3000kW
- Flows up to 5750 l/min
- Variable operational pressure 320 bar, design pressure 350 bar
- 6 Standardized reservoirs
- 4 Standardized frames
- Single or redundant filters & coolers
- Optional integrated starting cabinets
Examples of configurations

- Configuration with 2 pump-motor combinations and redundant cooling

- Configuration with 4 pump-motor combinations and control cabinet

- Configuration with 6 pump-motor combinations, redundant cooling, deep filtration set and control cabinets
Individual: the right power unit for every application
With variable displacement pumps you can easily implement your individual drive concept. (IE3 motors as a standard).
Available pumps:
  ▶ Axial piston pumps
    (A15VSO 175/280, A4VSO 180/250, variable displacement pumps, vertically installed)

Save energy: with variable-speed Sytronix drives
Lots of energy can be saved by optionally use drives from the Sytronix modular system. The variable-speed drive power units are not only particularly low-noise, more importantly, they save significant energy!

Clever design
The modular steel structured tank gives flexibility in the layout: the standardized tanks are available in tank capacities ranging between 6,000 and 30,000 liters. The tanks are available in carbon steel as well as stainless steel. Concept based on modules, makes it easy to transport and assemble the MHPU on site.

Control options
  ▶ Default with junctions boxes
  ▶ Default connected cabling to junction boxes
  ▶ Optionally remote monitoring
  ▶ Optionally delivered with full HPU controls:
    ▶ Soft starters
    ▶ HMI showing system status and alarms
    ▶ Data logging
    ▶ Remote monitoring

Multifunctional manifold: with all basic functions and variable interfaces
The multifunctional manifold contains all the standard basic functions you need. It is the central interface to the hydraulic system. Multiple designs available with or without filtration, with or without pulsation dampers and multiple pressure settings.

Sensor package integrates MHPU in the Industry 4.0 environment, increasing diagnostic capabilities
A comprehensive applied sensor package continuously records all relevant system states (oil quality, pressures, filling levels, temperatures, etc.), which enables condition monitoring.

Control options
IE3 electromotor combined with a single or double pump

Multifunctional manifold block

Reservoir

Redundant filter cooling skid

Pilot pump skid

Junction box

Drip tray

Deep filtration skid

Control cabinet (incl. cooling)
Pulsation damper
Pressure filter
Pressure connection

Cooling water connection (salt or fresh)

Walkway to easy access control cabinets and hydraulic components
The data specified above only serves to describe the product. As our products are constantly being further developed, no statement concerning a certain condition of suitability for a certain application can be deceived from our information. The information given does not release the user from the obligation of own judgement and verification. It must be remembered that our products are subject to a natural process of wear and aging.

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